



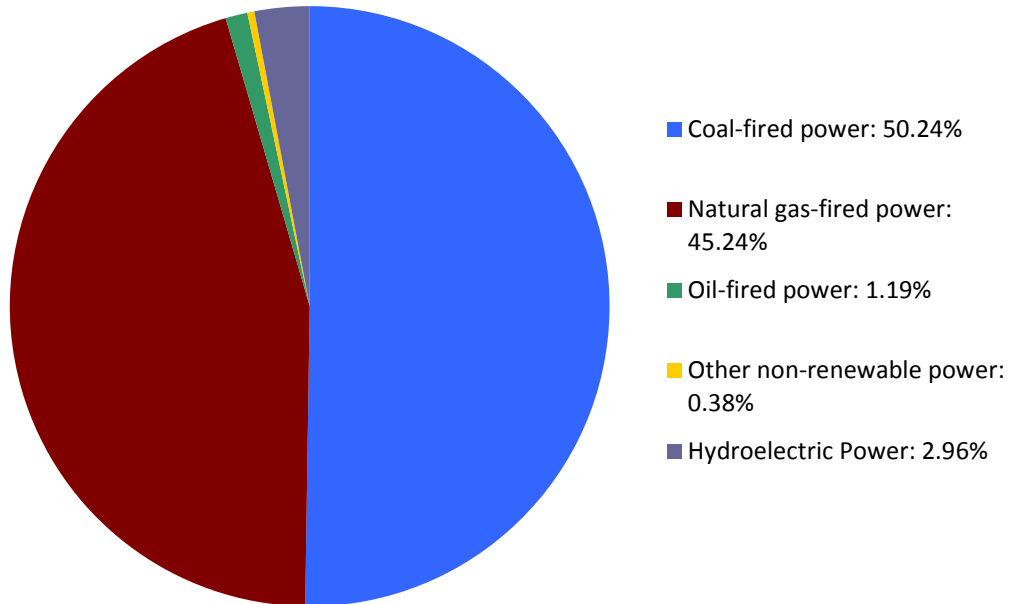
**Empire District Electric Company  
Utility-Owned Electric Generation and Emissions in 2009**

	Fuel Consumption, MMBTUs	Percent of Total		Net Electric Power Generated in 2009 (MWh)	Percent of Total	
Non-renewable sources						
Coal-fired power	14,037,661	59.46%		1,303,281	51.77%	
Natural gas-fired power	9,135,268	38.69%		1,173,571	46.62%	
Oil-fired power	331,728	1.41%		30,746	1.22%	
Nuclear power						
Other non-renewable power	105,728	0.45%		9,871	0.39%	
Non-renewable total	23,610,385	100.00%	96.93%	2,517,469	100.00%	97.04%
Renewable sources						
Hydroelectric Power	748,923	100.00%		76,734	100.00%	
Wind						
Waste and biomass						
Solar						
Geothermal						
Landfill Gas						
Renewable total	748,923	100.00%	3.07%	76,734	100.00%	2.96%
Grand total all sources	24,359,308		100.00%	2,594,203		100.00%

Fuel Type	Physical Units	Number of Units
<b>Bituminous Coal</b>	Short Tons	79,931
<b>Sub-Bituminous Coal</b>	Short Tons	723,815
<b>Natural Gas</b>	Mcf	8,968,173
<b>Distillate Fuel Oil</b>	Barrels	1,027
<b>Petroleum Coke</b>	Short Tons	14,136
<b>Tire-Derived Fuel</b>	Short Tons	3,776
<b>Hydroelectric</b>		0



### Net Generation by Fuel Type, 2009 for Empire District Electric Company





**Emissions from Electricity Generated in 2009: Empire District Electric Company**

Plant	Carbon Dioxide (CO <sub>2</sub> ) (Tons)	Carbon Monoxide (CO) (Tons)	Ammonia (NH <sub>3</sub> ) (Tons)	Nitrogen Oxides (NO <sub>x</sub> ) (Tons)	Sulfur Dioxides (SO <sub>2</sub> ) (Tons)
<b>Empire District Electric Company</b>	2,104,831.86	533.95	39.63	899.50	11,008.90
<b>Asbury</b>	1,569,193.37	200.57	4.39	794.40	11,006.50
<b>Empire Energy Center</b>	67,881.21	6.30	NV	44.90	0.00
<b>Ozark Beach</b>	0.00	NV	NV	NV	NV
<b>State Line Combined Cycle</b>	467,757.28	327.07	35.24	60.20	2.40

Plant	Volatile Organic Compounds (VOC) (Tons)	Course Particulate Matter (PM <sub>10</sub> Total) (Tons)	Fine Particulate Matter (PM <sub>2.5</sub> Total) (Tons)	Mercury (Hg) (LBS)
<b>Empire District Electric Company</b>	60.49	437.65	410.75	32.07
<b>Asbury</b>	27.87	407.64	380.75	32.07
<b>Empire Energy Center</b>	1.17	3.68	3.68	NV
<b>Ozark Beach</b>	NV	NV	NV	NV

'NV' = Emissions value not available.

Note: The data provided includes only generation and emissions from power plants owned by the utility. It does not include generation or emissions from power purchased by the utility and distributed to its customers.



**Pollution controls installed on plants operated by Empire District Electric Company**

<b>SO2 Controls</b>			
Plant	Control Equipment	Sorbent Type	Operational Efficiency
<b>Asbury</b>	No SO2 Controls Installed		
<b>Empire Energy Center</b>	No SO2 Controls Installed		
<b>Ozark Beach</b>	No SO2 Controls Installed		
<b>State Line Combined Cycle</b>	No SO2 Controls Installed		

<b>NOX Controls</b>				
Plant	Device Type	Description	Capture Efficiency	Control Efficiency
<b>Asbury</b>	SCR (SELECTIVE CATALYTIC REDUCTION)	SCR	100.00%	80.00%
<b>Empire Energy Center</b>	WATER INJECTION	WATER INJECTION	100.00%	50.00%
<b>Ozark Beach</b>	No NOX Controls Installed			
<b>State Line Combined Cycle</b>	WATER INJECTION	WATER INJECTION NOX CONTROL	100.00%	50.00%
<b>State Line Combined Cycle</b>	AMMONIA INJECTION	SELECTIVE CATALYTIC REDUCTION	100.00%	50.00%
<b>State Line Combined Cycle</b>	LOW NOX BURNERS	LOW NOX BURNERS	100.00%	50.00%



Missouri  
Department of  
Natural Resources

**Missouri Power plants owned and operated by Empire District Electric Company in  
2009**

Plant	County	Primary Fuel	Capacity (MW)	Net Generation (MWh)
<b>Asbury</b>	Jasper	Sub-Bituminous Coal	232	1,343,898
<b>Empire Energy Center</b>	Jasper	Natural Gas	379	96,312
<b>Ozark Beach</b>	Taney	Hydroelectric	16	76,734
<b>State Line Combined Cycle</b>	Jasper	Natural Gas	691	1,077,259

**Data Sources**

- Emissions Data: Missouri Department of Natural Resources, Air Pollution Control Program, Missouri Emissions Inventory System (MOEIS)  
<http://www.dnr.mo.gov/env/apcp/moeis/emissionsreporting.htm>
- CO2 Emissions calculated by Missouri Department of Natural Resources, Division of Energy, from EIA Fuel Consumption Data
- Fuel Consumption and Generation Data: United States Energy Information Administration, Form 923, United States Department of Energy  
[http://www.eia.gov/cneaf/electricity/page/eia906\\_920.html](http://www.eia.gov/cneaf/electricity/page/eia906_920.html)